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# (12) UK Patent Application (19) GB (11) 2 300 554 (13) A

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A01K 97/18 // A22B 3/08, A45B 3/00

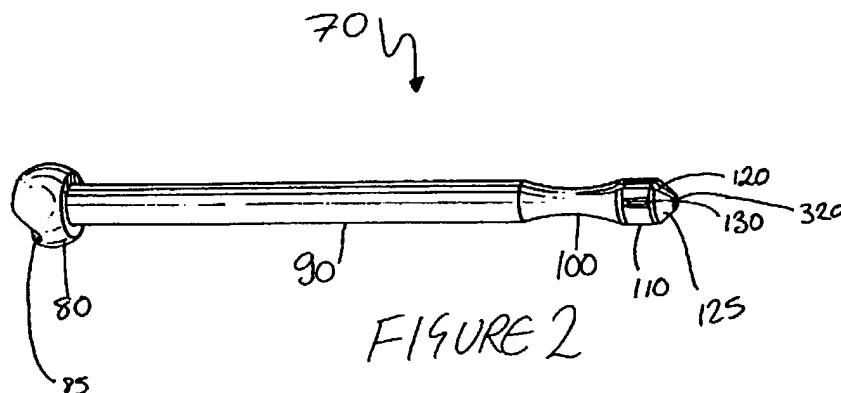
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A4P PAA P230

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GB 0683231 A US 4947576 A

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INT CL<sup>6</sup> A01K 97/18

## (54) Hook disgorger

(57) A hook disgorger for removing hooks from fishes' mouths has a hole (320) formed into its end, the hole opening into a channel (120). A collar portion (110) having a slot (130) is rotated into a first position with the slot in line with the channel (120). A fishing line is inserted into the channel so that it rests in the hole (320) and the collar (110) is then rotated into a second position covering the fishing line in the hole (320) and preventing it from falling out. The disgorger may subsequently be slid along the line to the hook until the latter enters the hole (320). The hook eventually abuts a shoulder formed rearwardly of the collar in the hole (320), further pushing of the disgorger then moving the hook. The disgorger may be attached to a device having a shaft and a gripper for clubbing fish; this device may in turn be stored in the handle of a wading staff.



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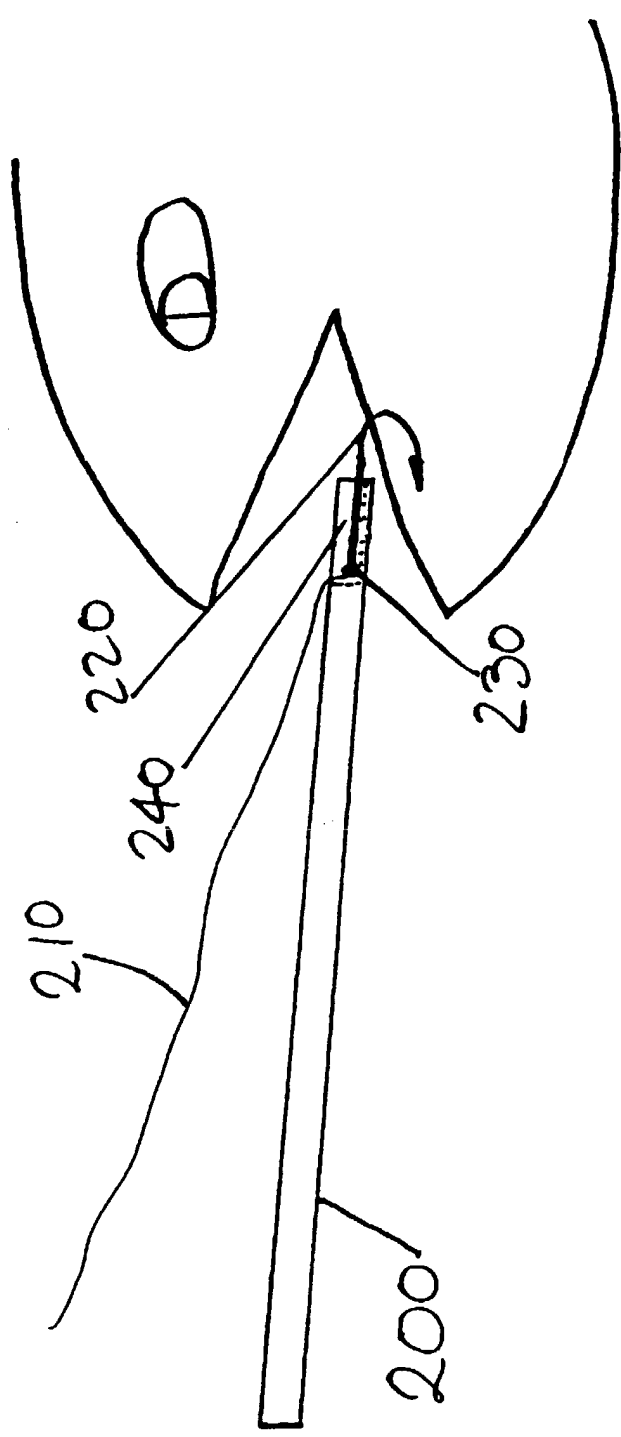


FIGURE 1

70 ↗

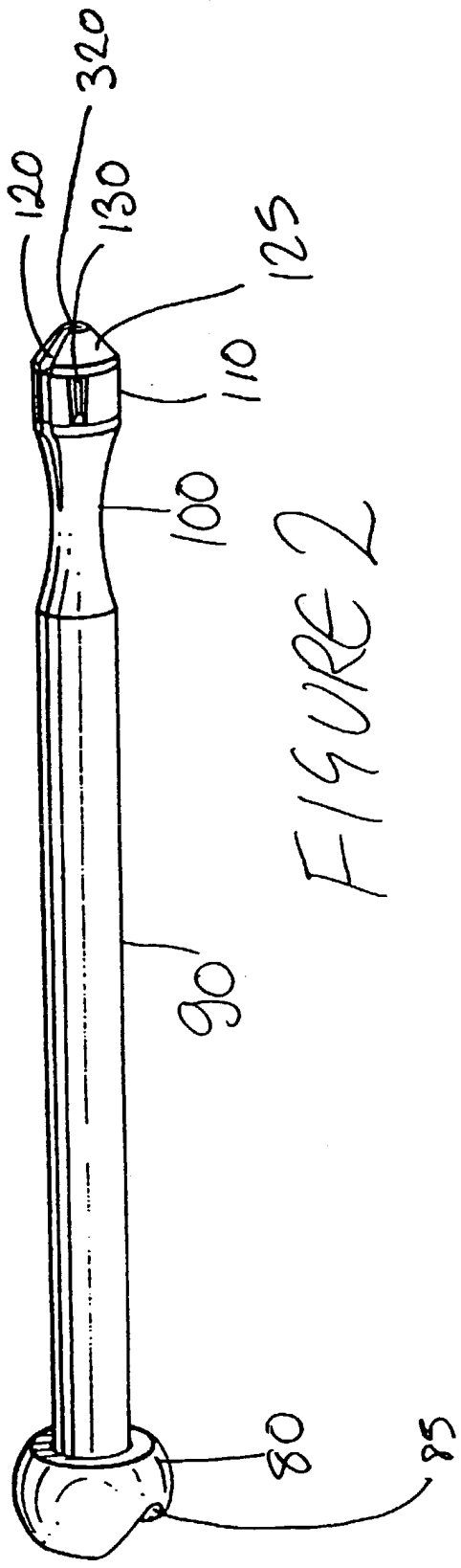


FIGURE 2

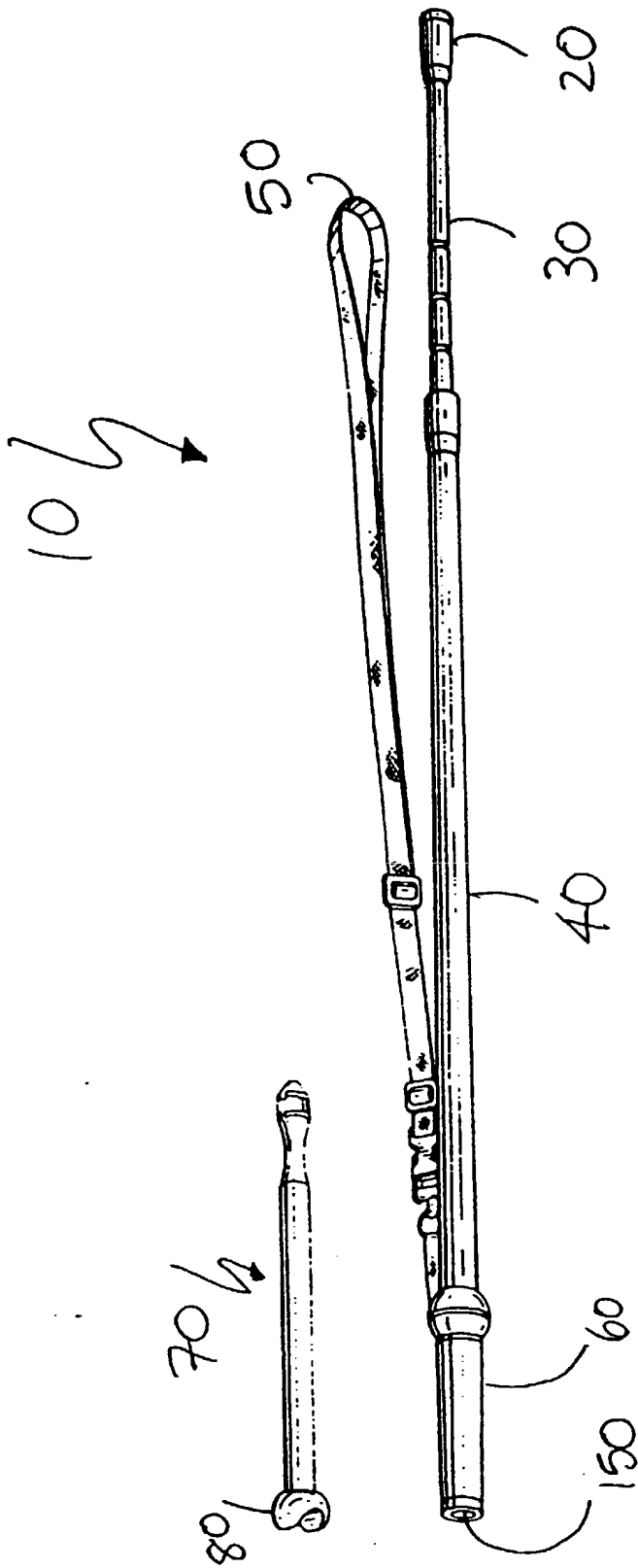


FIGURE 3

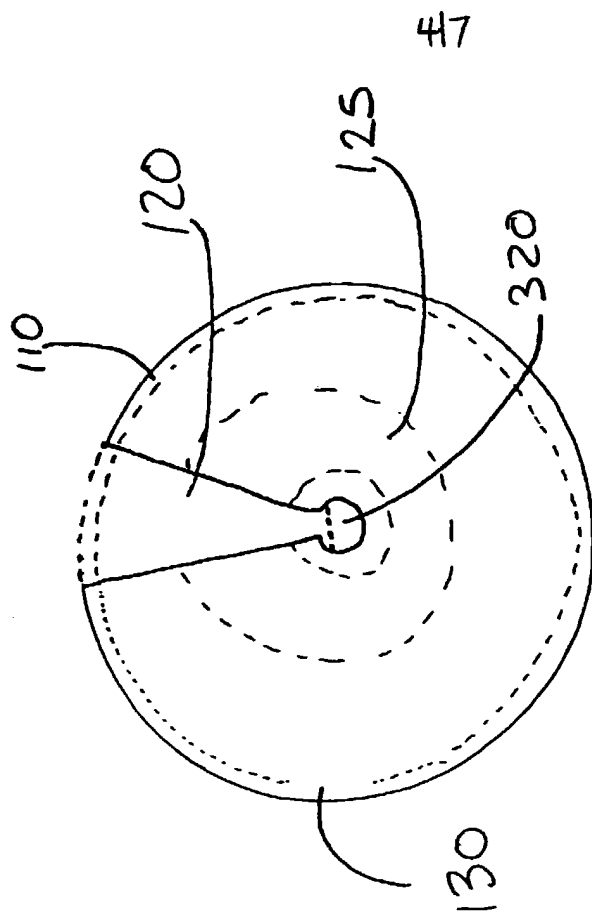


FIGURE 5

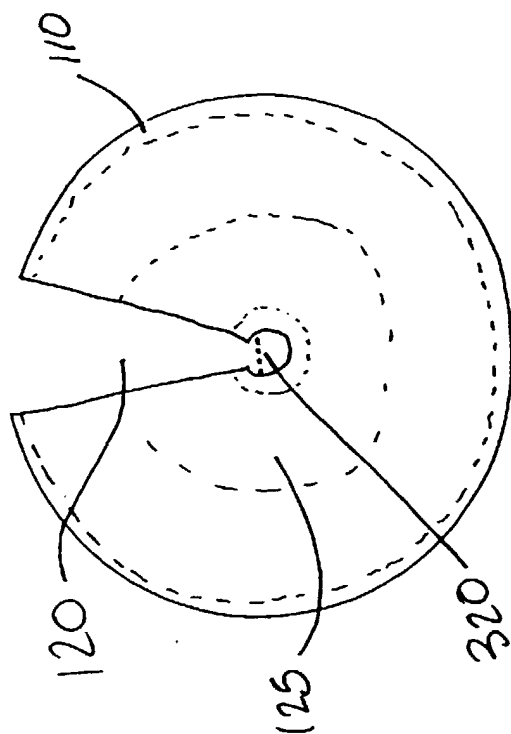


FIGURE 4

300 ↗

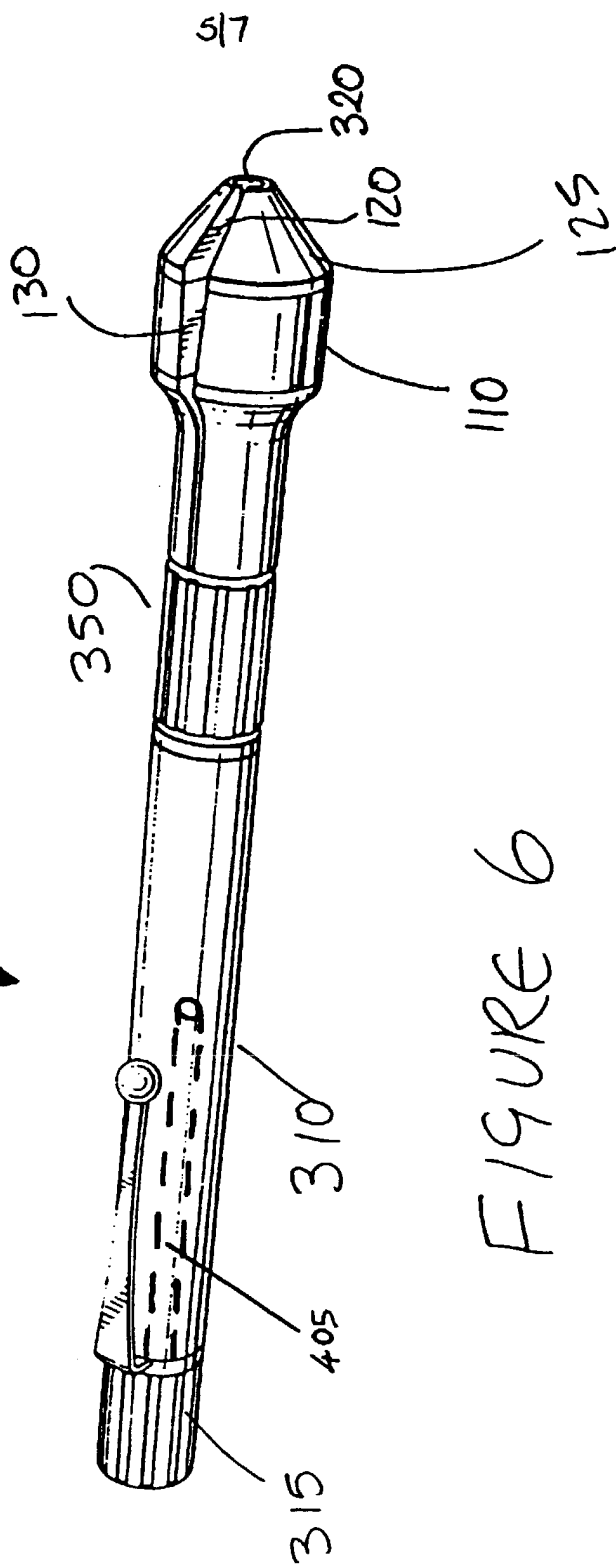


FIGURE 6

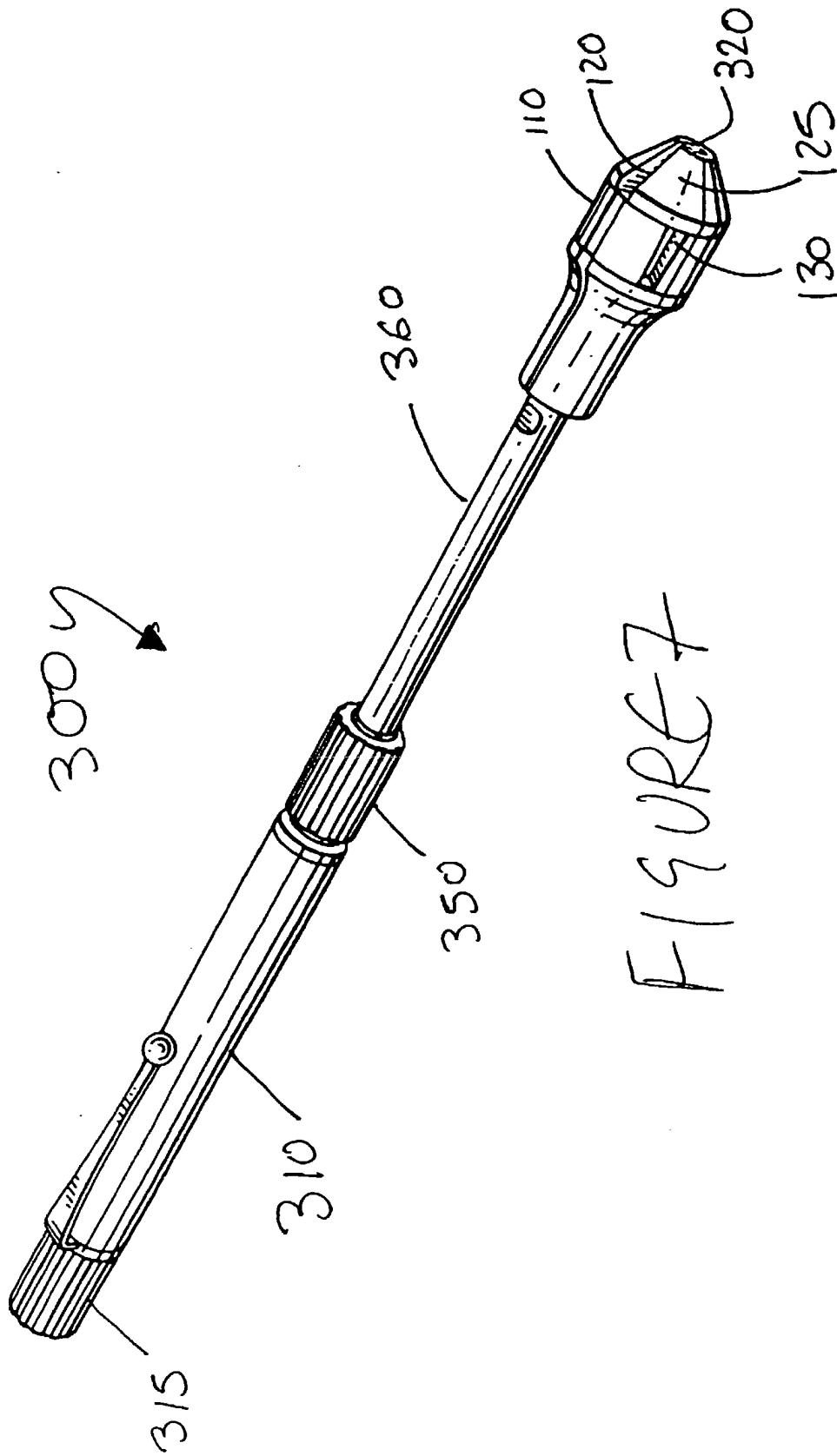
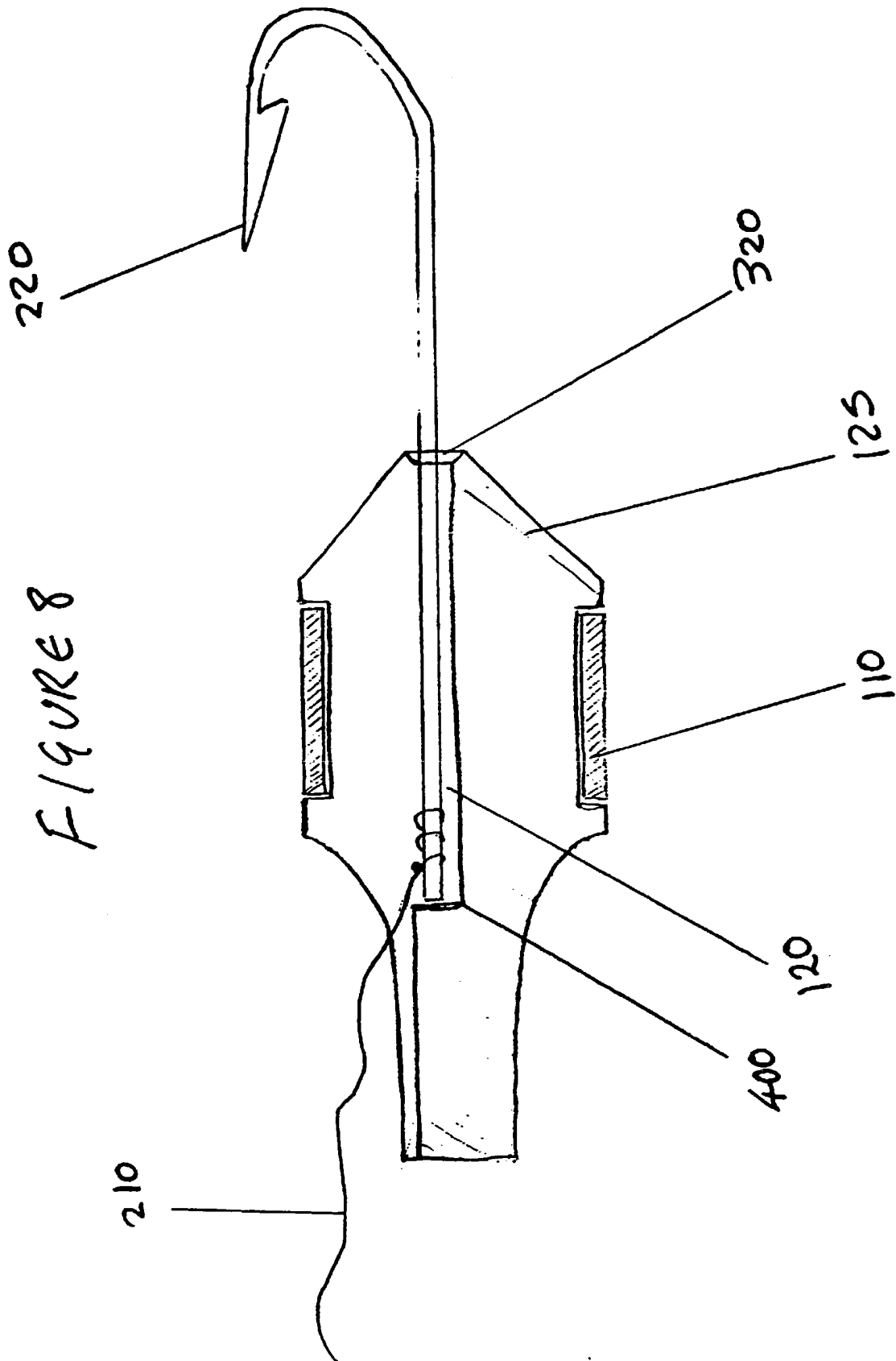




FIGURE 8



### Hook Disgorger

This invention relates to a disgorger for fishing hooks.

5       Once a fish has been caught, it is desirable to remove a hook from its mouth with minimal damage to the fish, particularly if the fish is to be replaced into the water from which it was caught.

10       Known hook disgorgers have an elongate body with a short, fixed channel formed along a portion of the longitudinal length of the body, as shown in Figure 1. Here, the channel 240 extends into one end of the body 200 of the disgorger. In use, when a fish has been hooked, the  
15       fishing line 210 to which the hook 220 is attached is inserted into the channel 240 of the disgorger which is then moved along the line until the end 230 of the hook abuts the rear wall of the channel 240. The disgorger is then pushed further into the mouth of the fish and the  
20       engagement of the hook end 230 with the rear wall of the channel causes the hook to be removed from the mouth. Thus, it is not necessary for the angler to insert his fingers into the mouth of the fish to remove the hook.

25       The primary problem with this type of disgorger is that the user requires a high degree of manual dexterity. The line must be held under tension whilst the disgorger is pushed along it towards the hook, and simultaneously the disgorger must be pushed upwards towards the line in  
30       order to ensure that the line remains in the channel. In the meantime, it will be necessary to control and restrain the fish if it is still alive.

35       It is an object of the present invention to provide a hook disgorger which alleviates the problems of the prior

art.

According to the present invention there is provided a hook disgorging device including a disgorgement head, the head defining a channel which opens towards the forward end of the head and which includes a hook-engaging shoulder rearwards of the forward end, the disgorgement head also including a cover arranged selectively to open and close a part of the channel.

Thus, in use, a fishing line attached to a hook to be disgorged is placed into the channel of the disgorgement head. The cover is then placed over the fishing line to restrain the line in the channel.

It is substantially easier to operate the hook disgorging device of the present invention than prior art ones: the fishing line does not need to be held under tension because the retainer retains the fishing line in the channel. The disgorging device is simply pushed along the line until the abutment rests against the hook, further pushing then causing the hook to be removed from the fish's mouth.

Preferably, the cover is a rotatable collar having an opening in its circumference which may selectively be aligned with the channel. The fishing line is thus placed in the channel whilst the opening is aligned with the channel, after which the collar is rotated to move the opening in it out of alignment with the channel and cover the line. The collar may have stop means associated with it to prevent the collar from being rotated through 360°, and in a preferred embodiment the stop means only allow rotation through 90° for quick and straightforward alignment of the opening in the collar with the channel.

The shoulder in the channel may be rearwards of the cover, and the disgorger head may have a guide hole in its end.

- 5     The invention also extends to a wading staff which is adapted to house the disgorger of the present invention.

10     It is sometimes necessary for an angler to enter a river, for example, in order to avoid entanglement of the line and hook with trees and bushes on the banks of the river. When fishing for salmon or trout, the river tends to be fast flowing and it is common practice to use a stick or staff to assist balance. This may, for example, be the handle of a landing net.

15     The problem with known wading staffs is that they tend to be of fixed length. This is inconvenient since the depth of a river can vary significantly.

20     In addition, it is clearly desirable to minimise the amount of equipment the angler has to carry into the river when wading. On the other hand, certain items of equipment are essential, notably some means for stunning a fish and a disgorger for removing a hook from its  
25     mouth. Once these actions have been carried out, the fish may be stored, for example, in the pockets of a waterproof fishing jacket. Without these implements, the angler must return to the river bank to store the fish which introduces the risk of entanglement of the fishing  
30     tackle once more.

Preferably, therefore, the hook disgorger is mounted on a shaft. This shaft may also have means for clubbing a fish, such as a priest, mounted on it.

35

The hook disgorger, shaft and priest may be stored in the handle of a wading staff. In this case, the staff may be of adjustable length, by forming the staff of a leg portion and shaft, for example. The leg portion may then be arranged to telescope into the shaft.

The present invention can be put into practice in various ways which will now be described by way of example with reference to the accompanying drawings in which :-

Figure 1 shows a sectional view of a prior art hook disgorger and the manner in which it is used to remove a hook from a fish;

Figure 2 shows a perspective view of a device having a hook disgorger according to the present invention with its end in its second position, together with a priest;

Figure 3 shows a perspective view of a wading staff in which the priest/ disgorger device of Figure 2 may be stored;

Figure 4 shows an end view of the hook disgorger of the present invention in its first position;

Figure 5 shows an end view of the hook disgorger of the present invention in its second position;

Figure 6 shows a perspective view of a pen-shaped implement having the hook disgorger of the present invention in its first position;

Figure 7 shows a perspective view of the pen-shaped implement of Figure 6 having the hook disgorger of the present invention extended and rotated into its second

position; and,

Figure 8 shows a sectional view of the hook disgorger of the present invention.

5

10 A hook disgorger is located at the end of a shaft distal from a ball hammer or priest 80, and is suitably formed from a plastics material, for example Nylon-66 or Nylotron™. It consists of a waisted rear portion 100, a  
15 rotatable annular collar 110 and a tapered front portion 125. As may be seen by reference to Figures 4 and 5, a part-circular guide hole 320 extends axially from the end of the front portion 125 towards the waisted rear portion 100. A segment of this hole 320 opens into a channel 120  
which also extends axially towards the waisted rear section 100.

20 The annular collar has a slot 130 cut in its circumference and may be rotated about the axis defined by the hole 320. Thus, the slot may selectively be aligned with the channel 120. Preferably, the portion 130 has two stops, so that it may only rotate through 90° between the positions illustrated in Figures 4 and 5 respectively.

25

30 The device shown in Figure 2 has an elongate handle portion 90, at one end of which is a ball hammer or priest 80. This priest is preferably formed of a rigid, dense material of sufficiently mass to stun a fish when an angler strikes a blow to its head. Brass or aluminium/bronze alloy are particularly suitable materials since they are robust and may be polished to provide an aesthetically pleasing finish. A groove 85 is  
35 formed in the top of the priest 80, the purpose of which will be described in connection with Figure 3.

In use, the priest/disgorger device is gripped with one hand by its shaft 90, the annular collar having previously been rotated so that it rests in the "open" position illustrated in Figure 4. A fishing line 210, which is attached to a hook 220 by a knot or other fastening means 230, the hook being attached to the mouth of a fish, is introduced into the hole 320 through the slot 130 and into the channel 120. The hand not gripping the shaft 90 then rotates the annular collar 110 through 90° to the position shown in Figures 2 and 5, at which point the fishing line is constrained within the confines of the channel 120 and hole 320.

The priest is then moved along the fishing line towards the hook; because of the constraint on the radial movement of the line by the annular portion 110, only one hand is required for this. The diameter of the hole 320 is chosen to be large enough to permit free movement of the fishing line and to guide the hook 220 and its attachment point 230 toward the shoulder 400 shown in Figure 8. Once the disgorger has been moved along the line so that the hook 220 and attachment point 230 abut the shoulder 400, further movement of the disgorger towards the hook causes the hook to be moved further into the mouth of the fish and thus be disgorged.

The wading staff 10 shown in Figure 3 consists of a shaft 40, a handle 60, a carrying strap 50 and an adjustable leg portion 30 having a foot 20 at its end. The means for adjusting the length does not form part of the invention and will not be discussed in detail. It is important to appreciate, however, that the joint allows the full weight of the human body to be placed upon it without any risk of the extendable leg portion 30 collapsing into the shaft 40. The joint also prevents water from ingressing

into the shaft 40 which is hollow to receive the leg portion 30. The staff is made of a robust yet lightweight material such as PVC or nylon covered aluminium.

5     The handle 60 has an axial bore 150 of a diameter suitable to allow the priest/disgorger device 70 of Figure 2 to be housed in it. The priest 80 is larger than the bore diameter and thus acts as a stop when the shaft of the device 70 is inserted into the handle 30. It also  
10    has a generally planar base so that insertion of the device 70 fully into the handle 60 causes the priest 80 to sit flush with the handle end. When the device 70 is inserted, the recess in the priest 80 acts as a thumb rest; the hand grips the handle and the thumb rests in  
15    this recess.

Figure 6 shows a second implement 300 to which the hook disgorger of the present invention may be added. The disgorger itself is substantially identical to that  
20    attached to the shaft of the device 70 described with reference to Figure 2. The implement is generally pen shaped and has a barrel 310 to which a clip is attached so that it may be worn in a jacket pocket, for example.

25    Located along the axis of the barrel 310 is a rod 405. This rod has a diameter slightly smaller than the inner diameter of a tube 360 which allows the disgorger head to be extended from the barrel, so that when the pen-shaped implement 300 is in its retracted position shown in  
30    Figure 6, the rod lies coaxially inside the (retracted) tube 360, thereby reducing the overall length of the implement 300. The rod 405 is removable by unscrewing the end 315 of the barrel 310 and is formed from, or coated with a ceramic material such as silicon carbide. The  
35    purpose of this is to allow fishing hooks to be



sharpened, such as is sometimes necessary after a fish has been caught.

- 5 A rotatable knurled collet 350 is located between the barrel 310 and the hook disgorging; the disgorging is mounted on the tube 360 and rotation of the collet 350 permits this tube 360 to be lockably extended into the position shown in Figure 7. This permits the implement 310 to be inserted further into the mouth of the fish.

CLAIMS

1. A hook disgorger comprising a disgorgement head, the head defining a channel which opens towards the forward end of the head and which includes a hook-engaging shoulder rearwards of the forward end, the disgorgement head also including a cover arranged selectively to open and close a part of the channel.
2. A hook disgorger as claimed in claim 1, in which the cover is a rotatable collar having an opening in its circumference which may selectively be aligned with the channel.
3. A hook disgorger as claimed in claim 2, in which the rotatable collar has stop means associated with it to prevent the collar from being rotated through 360°.
4. A hook disgorger as claimed in claim 3, in which the stop means allow rotation of the collar through 90° only.
5. A hook disgorger as claimed in any one of the preceding claims, in which the shoulder is rearwards of the cover.
6. A hook disgorger as claimed in any one of the preceding claims, in which a guide hole is formed in the end of the disgorger.
7. A hook disgorger as claimed in any one of the preceding claims in combination with a shaft and priest means for clubbing a fish.

8. A combination as claimed in claim 7, in which the priest means is a generally spherical mass of a rigid, dense material.
- 5 9. A combination as claimed in claim 7 or 8, in further combination with a wading staff.
- 10 10. A combination as claimed in claim 9, in which the priest means is insertable into the wading staff.
- 11 11. A combination as claimed in claim 10, in which the priest means is insertable into a handle of the wading staff.
- 15 12. A combination as claimed in any one of claims 9, 10 or 11, in which the wading staff is of adjustable length.
- 20 13. A hook disgorger as claimed in any one of claims 1 to 7 in which the disgorgement head forms one end of an elongate disgorger body, the body having securement means at an opposite end thereof for securing the disgorger in a pocket of a user.
- 25 14. A hook disgorger as claimed in claim 13 including hook-sharpening means.
- 30 15. A hook disgorger as claimed in claim 14 in which the hook-sharpening means comprises a hook-grinding rod within the disgorger body.
- 35 16. A hook disgorger as claimed in claim 15 in which the hook-grinding rod is removable from the body via the said opposite end.

17. A hook disgorger constructed and arranged substantially as specifically described with reference to and as shown in Figures 2, 3, 4, 5 and 8 of the accompanying drawings.

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18. A hook disgorger constructed and arranged substantially as specifically described with reference to and as shown in Figures 4 to 8 of the accompanying drawings.

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**Patents Act 1977**  
**Examiner's report to the Comptroller under Section 17**  
**(The Search report)**

Application number  
 GB 9509469.4

**Relevant Technical Fields**

- (i) UK Cl (Ed.N)      A1A (A7)  
 (ii) Int Cl (Ed.6)      A01K 97/18

Search Examiner  
 R F PHAROAH

Date of completion of Search  
 11 JULY 1995

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(ii)

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Category	Identity of document and relevant passages	Relevant to claim(s)
X	GB 683231 A      (HOWORTH) see page 2, lines 39-46 page 2, lines 57-68	1, 2, 3, 4, 6, 13
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